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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte VON K. McCONNELL
and ARUN SANTHARAM

Appeal 2007-1090
Application 10/071,833[1]
Technology Center 2400

Decided:[2] April 27, 2009

Before LEE E. BARRETT, MAHSHID D. SAADAT, and JAY P. LUCAS, *Administrative Patent Judges*.

BARRETT, *Administrative Patent Judge*.

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 134(a) from the final rejection of claims 1-41. We have jurisdiction pursuant to 35 U.S.C. § 6(b).

We reverse.

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[1] Filed February 7, 2002, titled "Method and System for Facilitating Services in a Communication Network Through Data-Publication by a Signaling Server."

[2] The two-month time period for filing an appeal or commencing a civil action, as recited in 37 C.F.R. § 1.304, begins to run from the decided date shown on this page of the decision. The time period does not run from the Mail Date (paper delivery) or Notification Date (electronic delivery).

STATEMENT OF THE CASE

The invention

The invention relates to facilitating services in a communication network. As shown in Figure 1, the invention provided an enhanced proxy server 14 between a communicating entity 12 (a user or subscriber) and an application server 16, where the enhanced proxy server has access to a data store 22. A "proxy server" is a computer system or router that breaks the connection between sender and receiver and functions as a relay between client and server. The application server may provide services such as setting up and facilitating a group communication session, such as a push-to-talk (PTT) session, or multicasting a message, such as an instant message, or prompting for and recording a voice message (Spec. 11: 14-18).

As shown in Figure 2, when the enhanced proxy server receives a signaling message (e.g., a session initiation protocol (SIP) message, such as an INVITE or MESSAGE, Spec 7: 18-19), it proxies (relays) the signaling message to the application server and extracts data from the data store and makes it available for use by the application server. For example, if the application server is a PTT server and the communication service is setting up a PTT session among a group, the data could be a group-list for the originating party (Spec. 17: 14-18).

The claims

Claim 1 is illustrative:

> 1. A method comprising:
>
> receiving into a network entity a signaling message indicative of a network communication;
>
> the network entity responsively extracting from a data store a set of data usable by an application server to carry out a communication service in response to the signaling message; and
>
> the network entity (i) outputting the signaling message for transmission over a network to the application server and (ii) making the set of data available for use by the application server in carrying out the communication service in response to the signaling message.

The references

Maggenti	US 6,477,150 B1	Nov. 05, 2002 (filed Mar. 03, 2000)
Holden	US 6,771,639 B1	Aug. 03, 2004 (filed Apr. 10, 2000)

The rejections

Claims 1-10, 17-19, 21-29, and 31-40 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Maggenti.

Claims 11-16, 20, 30, and 41 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Maggenti and Holden.

FINDINGS OF FACT - MAGGENTI

Maggenti describes a system and method for providing group communication services in an existing communication system by installing a communication manager in a data network such as the Internet. Abstract.

The communication manager acts as a switch, allowing communications from any group member to be transmitted to all other group members. Abstract.

Figure 2 shows a group communication system 200, such as a push-to-talk (PTT) system, having a communication manager (CM) 218 on a data network 214, where a defining characteristic is that only one user may transmit information to other users at any given time (col. 5, ll. 26-29).

A "net" denotes a group of communication device users authorized to communicate with each other, where a central database generally contains information identifying the members of each particular net (col. 4, ll. 60-64).

Net members communicate with communication devices (CDs), such as wireless telephones 202, 204, and 206 (col. 5, ll. 5-10), where voice and/or data is converted into data packets by the CD (col. 6, ll. 31-32).

As shown in Figure 3, communication between CM 218 and CDs uses one of three protocols: a Session Initiation Protocol (SIP) signaling protocol to control setup and control signaling between CDs and CM 218, a media signaling protocol, and media traffic (audio, including voice, video, or data) (col. 7, ll. 39-48; col. 20, l. 31 to col. 22, l. 43). In Figure 3, CD 202 "has

the floor," i.e., has the transmission privilege, and the other net members are listeners (col. 7, ll. 49-57).

Each CD maintains a database of information relating to group communications, such as a list of nets in which the CD is able to join, known as a group-list (col. 11, ll. 20-24).

Figure 6 shows a functional block diagram of the CM 218. CM 218 has three external interfaces: a SIP interface provided by a SIP user agent server 600 and a top level SIP redirect server 610, media signal and control are supported by media control units (MCUs) 602, and administration functions are supported by CLI and HTTP servers (col. 15, ll. 5-37).

The SIP redirect server 610 and SIP user agent server 600 associated with the MCUs require access to user and net information defined in the system. The SIP redirect server 610 may query global database 612 to redirect requests to a corresponding appropriate destination (in most cases the SIP user agent server 600) and SIP user agent server 600 requires access to local memory 606 to authenticate users, confirm users' access to nets, and define nets' session descriptions (col. 15, ll. 47-56; *see* col. 17, l. 7 to col. 18, l. 48 for description of two databases).

A net is assigned to an MCU 602 and MCU 602 is responsible for receiving incoming data packets from a transmitting CD and for sending duplicate copies of the received data packets to other members of the net to which the transmitting CD belongs (col. 15, l. 63 to col. 16, l. 11). After identifying the transmitting CD, MCU control 608 retrieves a list of net

members from local memory 606 and create a duplicate of the original data for each net member and sends it (col. 16, ll. 12-27).

The CD 202 negotiates for entry into the current membership of a net using SIP with the destination CM user agent server according to the protocol shown in Figure 7 ("SIP Call Signaling," col. 24), after which control takes place through point-to-point application level media signaling messages exchanged between each CD and the net's MCU (col. 30, ll. 20-25; "Media Signaling Message Sequence," col. 33).

DISCUSSION

Anticipation

Independent claims 1, 3, 17, and 26

Based on Appellants' arguments, we identify two common issues with respect to independent claims 1, 3, 17, and 26.

1.

Issue 1

Does Maggenti teach receiving a message and forwarding that same message to an application or application server?

In particular, claim 1 recites "receiving into a network entity *a signaling message*" and "the network entity (i) outputting *the signaling message* for transmission over a network to the application server." (Emphases added.) Claim 3 recites "receiving *an initiation message*" and "outputting *the initiation message* for transmission to the endpoint

application." (Emphases added). Claim 17 recites "proxy-server logic . . . to receive *a session initiation message* and to responsively output *the session initiation message* for transmission . . . to an endpoint application." (Emphases added.) Claim 26 recites "proxy-server functionality to receive *a session initiation message* and to forward *the session initiation message* to an application server." (Emphases added.) By elementary rules of claim interpretation, the definite article "the" refers to the same message which was received, i.e., to the message which provides its antecedent basis. Of course, the claims, being open-ended, do not preclude the output message from including more than the initial message. As described with respect to Appellants' Figure 2, when the enhanced proxy server receives a signaling message, it proxies (relays) the signaling message to the application server.

Analysis

The Examiner finds that the claimed "network entity" receiving a "signaling message indicative of a network communication" in claim 1 corresponds to the communication manager CM 218 (col. 2, ll. 33-38) which receives a signaling message at SIP server (col. 21, ll. 4-9), and the claimed "data store" corresponds to the "user database" in the CM 218 storing pertinent data corresponding to each communication device CD (col. 17, ll. 14-26) (Ans. 23). The Examiner does not identify what structure corresponds to the "application server." The Examiner apparently identifies the destination SIP user-agent server (col. 12, ll. 3-7; col. 21, ll. 4-9) as corresponding to the "the network entity (i) outputting the signaling message

for transmission over a network to the application server and (ii) making the set of data available for use by the application server in carrying out the communication service in response to the signaling message" (Ans. 4), and that this SIP message "is a message utilized for the setup of communications by the application server, and the data transmission uses signaling protocol for messages between network nodes" (Ans. 24). Thus, the "network entity" is the CM 218 shown in Figure 6 of Maggenti.

Maggenti describes that in response to CD 202 attempting to join a net by sending an INVITE message, "the destination SIP user-agent server confirms that CD 202 is authorized to participate in the selected net and responds to the invitation, embedding a description of the media traffic and signaling parameters to use to participate in the net in the content of its response" (col. 12, ll. 3-7).

Appellants argue that "the *response message* (200 OK) generated by the CM in that scenario is clearly not *the signaling message* received by the CM (or even another form of the signaling message, e.g., with an added via header or the like). Rather, it is an altogether different message. The Examiner has not disputed this point." Br. 4.

The Examiner does not dispute Appellants' assertion, but states that "[c]learly, this is a message utilized for the setup of communications by the application server, and the data transmission uses signaling protocol for messages between network nodes" (Ans. 24).

It appears that the Examiner does not appreciate the argument that the signaling message which is output to an application server must be the same as the signaling message which is received by the network entity. Although the claims do not recite the term "proxy server," the function of a proxy server is to relay the messages it receives from a client to an application which Maggenti does not do. The SIP server in Maggenti is a "signaling protocol used to control setup and control signaling between CDs and CM 218" (col. 8, ll. 54-55) and, as shown in Figure 7, the SIP messages sent and received are different. In addition, the Examiner does not identify the application server to which the message is sent. It appears that the Examiner is trying to read the claimed application server on the CD because the rejection refers to sending data from the destination SIP user agent server, which is part of the CM 218, to the CD 202 at column 12. The CD cannot be an application server because it is not a server and does not handle applications and it receives a different message than it sent. If there is an application server in Maggenti, it is the CM 218 which is responsible for setting up the communication service between CDs. The CM 218 in Maggenti does not receive and output the same message, as required by claims 1, 3, 17, and 26.

Conclusion

Maggenti does not teach receiving a message and forwarding that same message to an application or application server. For this reason, the rejection of claims 1, 2, 3-10, 17-19, 21-25, 26-29, and 31-35 is reversed.

2.

Issue 2

Does Maggenti teach responsively extracting data and making the data available to an application or application server?

Claim 1 recites "responsively extracting from a data store a set of data" and "making the set of data available for use by the application server in carrying out the communication service." Claim 3 recites "responsively extracting from a first data store a set of data" and "making the set of data available for use by the endpoint application to set up the communication." Claim 17 recites "logic . . . executable by the processor, in response to receipt of a session initiation message, (i) to extract from the user-profile data a set of data . . . and (ii) to make the set of data available for use by the endpoint application in responding to the session initiation message." Claim 26 recites "logic executable by the platform, in response to receipt of the session initiation message, (i) to extract from a profile store data . . . and (ii) to make the set of data available for use by the application server to facilitate performance of the service."

Analysis

The Examiner finds that Maggenti teaches making data available to an application server, as recited in claim 1, at column 12, lines 3-7 (Ans. 5). The Examiner also finds that Maggenti teach a database for a CD and a database for the CM and that "[i]t would be obvious to anyone skilled in the art to access, extract, and manipulate the user specific information within the

CM or CD database(s) to setup and manage a communications session between two network endpoints" (Ans. 24).

Appellants note that the rejection is based on anticipation, not obviousness, and the Examiner has not cited any objective evidence that the claimed subject matter would have been obvious (Reply Br., Sec. B.2).

Maggenti describes that in response to CD 202 attempting to join a net by sending an INVITE message, "the destination SIP user-agent server confirms that CD 202 is authorized to participate in the selected net and responds to the invitation, embedding a description of the media traffic and signaling parameters to use to participate in the net in the content of its response" (col. 12, ll. 3-7).

As discussed in connection with Issue 1, the CD is not an application server, so the fact that CM 218 sends it data from a local store does not meet the "making available" to an application server limitations of the claims. One problem with the rejection is that it does not clearly identify the distinct entities required by the claims: a source of a signaling message, a network entity receiving the message, and an application server using the data to carry out a communication service (in representative claim 1). Thus, there is confusion about how the claims are intended to correspond to the teachings in Maggenti. Of course, the obviousness reasoning is inappropriate in an anticipation rejection, but we do not reverse only because of this reason. Maggenti does not teach the "making available" limitation.

Conclusion

Maggenti does not teach responsively extracting data and making the data available to an application or application server. For this additional reason, the rejection of claims 1, 2, 3-10, 17-19, 21-25, 26-29, and 31-35 is reversed.

Independent claim 36

Issue

Does Maggenti teach a registration server that extracts a buddy-list in response to a signaling message and "making the buddy-list available for use by an application server in setting up a communication for the user"?

Analysis

The issue is the same as Issue 2 in the anticipation rejection of claims 1, 3, 7, and 26 except it recites a specific type of data, a buddy-list. We address the Examiner's additional rationale here.

The Examiner finds that the signaling message corresponds to the SIP message from a CD received by the CM (col. 21, ll. 4-9) and that making the buddy-list available corresponds to list of nets stored by the CD (col. 10, ll. 33-40) (Ans. 13).

Appellants argue that it "would be inconsistent and improper to conclude that the *CM* is the registration server for part of claim 36 (i.e., for purposes of receiving a message) but that *the* CD is the registration server for another part of claim 36 (i.e., for purposes of extracting data and making

the data available for use by an application server)" (Br. 10). It is argued that the cited portions of Maggenti do not teach the registration server functions recited (*id.*).

We agree with Appellants that it is improper to construe both the CM and the CD as the registration server. Under the Examiner's interpretation, the CD cannot satisfy the step of "receiving into a registration server a signaling message indicating that a user is online in a communication network" because the CD represents the user. And, under the Examiner's interpretation, the CM cannot satisfy the step of "the registration server responsively extracting from a data store a buddy-list designated for the user, and the registration server making the buddy-list available for use by an application server in setting up a communication for the user" because it is the CD that extracts the list. Part of the confusion is due to the fact that the Examiner does not identify the three entities of a user, a registration server, and an application server or explain how the registration server receives a signaling message and sends a buddy-list to the application server. Maggenti does not anticipate the limitations of claim 36.

Conclusion

Maggenti does not teach a registration server that extracts a buddy-list in response to a signaling message and "making the buddy-list available for use by an application server in setting up a communication for the user." The rejection of claims 36-40 is reversed.

Obviousness

Independent claim 12

The Examiner finds that Maggenti discloses the subject matter of claim 12 except for the use of a signaling proxy server used in session communications (Ans. 16). The Examiner finds that Holden discloses a signaling proxy server processing data for session communications at column 4, lines 52-55 and 57-59 (*id.*) and concludes that it would have been obvious "to modify Maggenti to utilize a proxy server in a communications session initiation as taught by Holden . . . in order to enable increased capacity and reliability for communications over a packet based network" (*id.* at 17).

Appellants argue (Br. 12-13) that the proxy server of Holden fails to make up for the deficiency of Maggenti with respect to the steps of "in response to the initiation message, the signaling proxy server extracting from a data store a set of data usable by an application server to set up the communication" and "the signaling proxy server forwarding the initiation message to the application server and making the set of data available for use by the application server in responding to the initiation message." It is argued that the Examiner does not point to any disclosure in Holden that makes up for that deficiency (*id.* at 13).

As discussed in Issues 1 and 2 of the anticipation rejection, Maggenti does not describe the limitations without the proxy server. The question is whether Holden cures this deficiency.

Issue

Does the Examiner establish that Holden cures the deficiency of Maggenti with respect to the steps of extracting data, forwarding the initiation message to the application server, and making the data available for use by the application servers?

Analysis

The Examiner points to the teachings in Holden that "[t]he system 14 may be a SIP proxy system, which may include an intermediary program that acts as both a server and a client for making requests on behalf of other clients" (col. 4, ll. 52-55) and that "[a]lternatively, the system 16 may go through the SIP proxy system 14 to make the call to the SIP system 18" (col. 4, ll. 57-59). This merely discloses that proxy servers were known, which proposition is not in dispute. Assuming the proxy server in Holden receives and forwards an initiation message, Holden does not describe that the proxy server performs the steps extracting data and making the data available for use by an application server. The point of Appellants' invention is that the proxy server performs these steps and neither Maggenti nor Holden disclose a network entity that performs these steps.

Conclusion

The Examiner has not established that Holden cures the deficiency of Maggenti with respect to the steps of extracting and making the data

available for use by the application servers. The rejection of claims 12-16 is reversed.

Dependent claims 11, 20, 30, and 41

The Examiner relies on Holden as teaching instant messaging (IM) capabilities in claims 11, 20, 30, and 41 (Ans. 14-15, 18-20).

Appellants argue that Holden does not cure the deficiencies of Maggenti with respect to the independent claims (Br. 13-14).

We agree with Appellants that the fact that the application program can include instant messaging does not cure the deficiencies notes with respect to the independent claims. The rejection of claims 11, 20, 30, and 41 is reversed.

CONCLUSION

The rejection of claims 1-10, 17-19, 21-29, and 31-40 under 35 U.S.C. § 102(e) over Maggenti is reversed.

The rejection of claims 11-16, 20, 30, and 41 under 35 U.S.C. § 103(a) over Maggenti and Holden is reversed.

REVERSED

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